

1704/203
BUILDING CONSTRUCTION II AND
COMPUTER AIDED DESIGN
Oct./Nov. 2018
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL
CRAFT CERTIFICATE IN BUILDING TECHNOLOGY
MODULE II

BUILDING CONSTRUCTION II AND COMPUTER AIDED DESIGN

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

- Answer booklet;
- A, printing papers;
- Drawing instruments;
- Compact disk (CD);
- Computer Installed with CADD software.

This paper consists of SEVEN questions in TWO sections; A and B.

Answer FIVE questions choosing THREE questions from Section A, TWO questions from section B.

All questions carry equal marks.

Maximum marks for each part of a question are as indicated.

Candidates should answer the questions in English.



This paper consists of 4 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A: BUILDING CONSTRUCTION II

Answer **THREE** questions from this section.

1. (a) Define the following terms used in chimney construction:
- (i) fire place;
 - (ii) flue;
 - (iii) hearth;
 - (iv) throat.
- (4 marks)
- (b) Sketch and label a detail to show the fixing of a window pane using putty. (6 marks)
- (c) Describe the following types of coats in painting of new work:
- (i) priming coat;
 - (ii) under coat;
 - (iii) finish.
- (6 marks)
- (d) State **four** functional requirements of a fireplace, flue and chimney construction. (4 marks)
2. (a) Sketch and label a ledged, braced and battened door. (9 marks)
- (b) Name **six** components of a truss. (3 marks)
- (c) Outline **four** advantages of precast concrete stairs. (8 marks)
3. (a) Define the following terms in staircase construction:
- (i) goings;
 - (ii) string;
 - (iii) balusters;
 - (iv) risers;
 - (v) nosing.
- (5 marks)
- (b) Outline **two** functions of a staircase. (4 marks)
- (c) Define the term 'scaffolding'. (1 mark)
- (d) Describe the following types of scaffolds:
- (i) patent scaffold;
 - (ii) suspended scaffold.
- (10 marks)



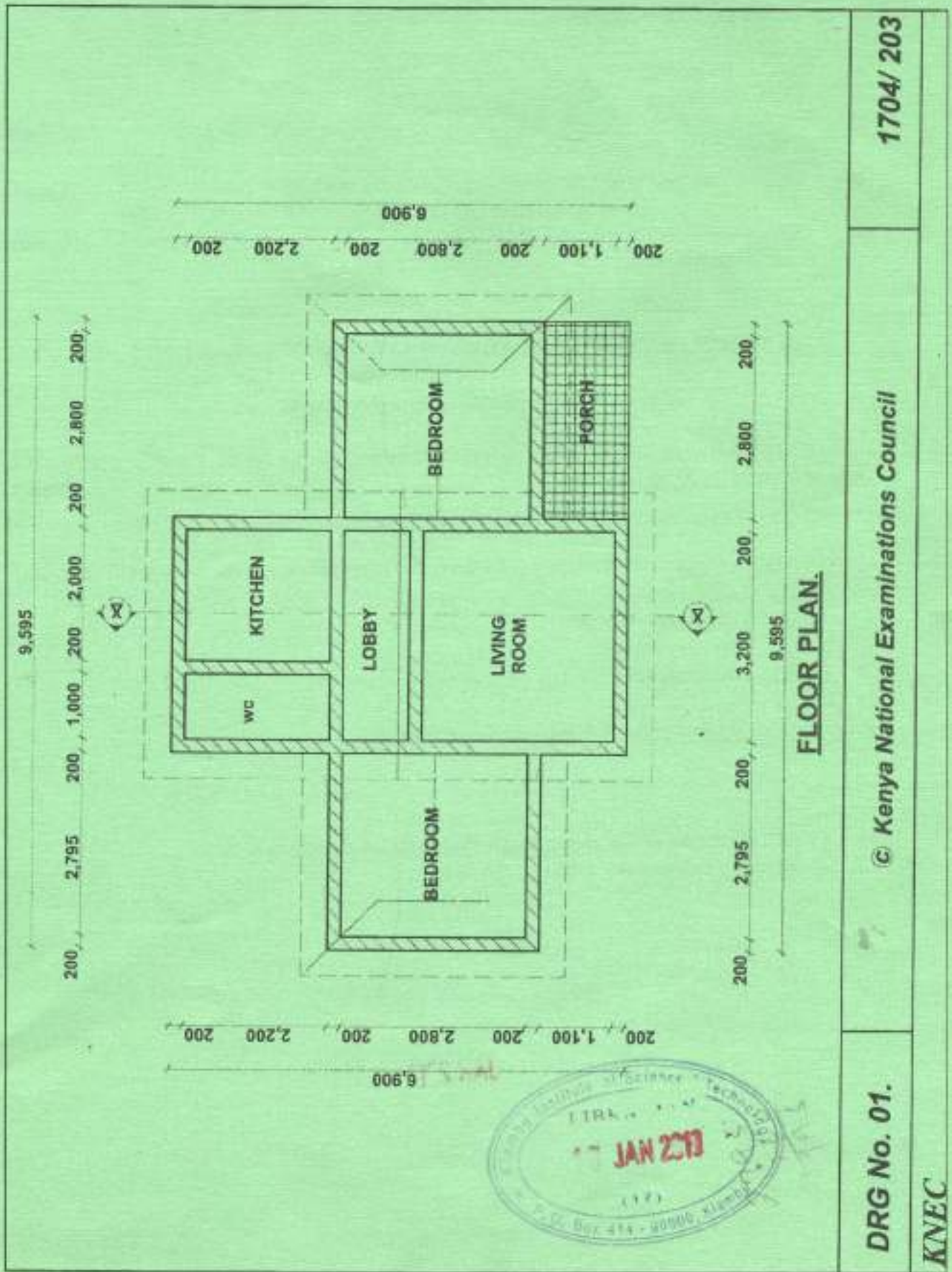
4. (a) Define the following terms:
- (i) plastering;
 - (ii) rendering.
- (2 marks)
- (b) Describe the procedure for plastering a masonry wall. (8 marks)
- (c) Sketch a typical eave detail. (10 marks)

SECTION B: COMPUTER AIDED DRAWING AND DRAFTING

Answer TWO questions from this section.

5. Using CADD software, draw and label a typical strip foundation detail. Print the drawing to a scale of 1:10 on an A₃ paper. (20 marks)
6. Using CADD software and drawing no. 01 draw the layout floor plan to include the following:
- (i) doors and windows;
 - (ii) sanitary fittings;
 - (iii) dimensions.
- Print the drawing to a scale of 1:100 on an A₃ paper. (20 marks)
7. Using CADD software and drawing No.01 draw and label section X-X. Print the drawing to a scale of 1:50 on an A₃ paper. (20 marks)





FLOOR PLAN.

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DRG No. 01.

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